

WEST Search History

DATE: Tuesday, September 16, 2003

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>			
L4	L1 and L2 and L3	668	L4
L3	proliferation	70679	L3
L2	antisense	37086	L2
L1	staphylococcus aureus	17159	L1

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 18:55:18 ON 16 SEP 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, EMBASE, CANCERLIT' ENTERED AT 18:55:46 ON
16 SEP 2003

L1 191225 STAPHYLOCOCCUS AUREUS
L2 95107 ANTISENS?
L3 931968 PROLIFERAT?
L4 37 L1 AND L2 AND L3
L5 15 DUP REM L4 (22 DUPLICATES REMOVED)

=>

L5 ANSWER 1 OF 15 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
 ACCESSION NUMBER: 1993:478661 BIOSIS
 DOCUMENT NUMBER: PREV199396112261
 TITLE: Hck tyrosine kinase activity modulates tumor necrosis factor production by murine macrophages.
 AUTHOR(S): English, Keith B. (1); Ihle, James N.; Myracle, Angela; Yi, Taolin
 CORPORATE SOURCE: (1) Dep. Pediatrics, Univ. Tennessee, Memphis, Le Bonheur Children's Med. Cent., 848 Adams, Memphis, TN 83103 USA
 SOURCE: Journal of Experimental Medicine, (1993) Vol. 178, No. 3, pp. 1017-1022.
 ISSN: 0022-1007.
 DOCUMENT TYPE: Article
 LANGUAGE: English

AB The hematopoietic cell kinase (hck) is a member of the src family of tyrosine kinases, and is primarily expressed in myeloid cells. Hck expression increases with terminal differentiation in both monocyte/macrophages and granulocytes and is further augmented during macrophage activation. Recent evidence has implicated src-related tyrosine kinases in critical signaling pathways in other hematopoietic lineages. Herein we demonstrate that manipulation of the level of hck expression in the murine macrophage cell line BAC1.2F5 alters the responsiveness of these cells to activation by bacterial lipopolysaccharide (LPS) but does not affect survival or **proliferation**. Overexpression of an activated mutant of hck in BAC1.2F5 cells augments tumor necrosis factor (TNF) production in response to LPS, whereas inhibition of endogenous hck expression, by **antisense** oligonucleotides, interferes with LPS-mediated TNF synthesis. Together, these observations suggest that hck is an important component of the signal transduction pathways in activated macrophages.

L5 ANSWER 2 OF 15 MEDLINE on STN DUPLICATE 3
 ACCESSION NUMBER: 2003369699 IN-PROCESS
 DOCUMENT NUMBER: 22785533 PubMed ID: 12903396
 TITLE: Effect of 6A8 alpha-mannosidase expression on the **proliferative** response of human B cell line 3D5.
 AUTHOR: Zhao F; Shi G; Li L; Zhu L
 CORPORATE SOURCE: Department of Immunology, Institute of Basic Medical Sciences, CAMS and PUMC, Beijing 100005, China... zhaoft@hotmail.com
 SOURCE: CHUNG-KUO I HSUEH KO HSUEH YUAN HSUEH PAO ACTA ACADEMIAE MEDICINAE SINICAE, (2000 Dec) 22 (6) 529-32.
 Journal code: 8006230. ISSN: 1000-503X.
 PUB. COUNTRY: China
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: Chinese
 FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
 ENTRY DATE: Entered STN: 20030808
 Last Updated on STN: 20030808
 AB OBJECTIVE: To study the effect of 6A8 alpha-mannosidase expression on the **proliferative** response of human B cell 3D5. METHODS: Recombination of adeno-associated virus vector(rAAV) mediated delivery of sense 6A8 DNA or **antisense** 6A8 DNA into 3D5 cells, and monoclonal antibody 6A8 alpha staining and Con A binding assay for determination of the change of 6A8 alpha-mannosidase expression, MTT assay for **proliferation** detection of 3D5 cells driven by **Staphylococcus aureus** crude cell suspension formalin-fixed (SAC), lower molecular weight B cell growth factor (LMW-BCGF), or rIL-6. RESULTS: The expression of 6A8 alpha-mannosidase was enhanced in sense 6A8-transduced cells and reduced in **antisense** 6A8-transduced cells. In comparison with the wild type and the mock-transduced cells, the **proliferative** response of the sense 6A8-transduced cells to SAC stimulation was enhanced (P < 0.05). However, transduction with **antisense** 6A8 did not affect

the response. In addition, transduction with either sense or **antisense** 6A8 had no effect on **proliferation** of 3D5 cells induced by LMW-BCGF or IL-6. CONCLUSION: The **proliferative** response to SAC stimulation was enhanced in the 3D5 cells with enhanced expression of 6A8 alpha-mannosidase. Either enhancement or reduction of 6A8 alpha-mannosidase expression had no effect on **proliferation** induced by LMW-BCGF or IL-6.

L5 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2002:781496 CAPLUS

DOCUMENT NUMBER: 138:12033

TITLE: Essential genes in microorganisms and their use as targets for **antisense** inhibition of **proliferation** and antibiotic screening

INVENTOR(S): Wang, Liangus; Zamudio, Carlos; Malone, Cheryl; Haselbeck, Robert; Ohlsen, Kari L.; Zyskind, Judith W.; Wall, Daniel; Trawick, John D.; Carr, Grant J.; Yamamoto, Robert; Forsyth, R. Allyn; Xu, H. Howard

PATENT ASSIGNEE(S): Elitra Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 1766 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 22

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077183	A2	20021003	WO 2002-XS9107	20020321
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2002061569	A1	20020523	US 2001-815242	20010321
WO 2002077183	A2	20021003	WO 2002-US9107	20020321
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:

US 2001-815242	A	20010321
US 2001-948993	A	20010906
US 2001-342923P	P	20011025
US 2002-72851	A	20020208
US 2002-362699P	P	20020306
WO 2002-US9107	A	20020321
US 2000-191078P	P	20000321
US 2000-206848P	P	20000523
US 2000-207727P	P	20000526
US 2000-242578P	P	20001023
US 2000-253625P	P	20001127
US 2000-257931P	P	20001222
US 2001-269308P	P	20010216

AB The sequences of **antisense** nucleic acids which inhibit the

proliferation of prokaryotes are disclosed. Thus, 6213 nucleic acid fragments are identified for which expression inhibits **proliferation** or is required for **proliferation** in *Enterococcus faecalis*, *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, *Salmonella typhimurium*, and *Staphylococcus aureus*. Cell-based assays which employ the **antisense** nucleic acids to identify and develop antibiotics are also disclosed. The **antisense** nucleic acids can also be used to identify proteins required for **proliferation**, express these proteins or portions thereof, obtain antibodies capable of specifically binding to the expressed proteins, and to use those expressed proteins as a screen to isolate candidate mols. for rational drug discovery programs. The nucleic acids can also be used to screen for homologous nucleic acids that are required for **proliferation** in cells other than *Staphylococcus aureus*, *Salmonella typhimurium*, *Klebsiella pneumoniae*, and *Pseudomonas aeruginosa*. The invention provides 38,184 such **proliferation**-required gene sequences (plus their encoded protein sequences). The nucleic acids of the present invention can also be used in various assay systems to screen for **proliferation** required genes in other organisms. [This abstr. record is one of twenty records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

L5 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2002:499635 CAPLUS

DOCUMENT NUMBER: 137:42670

TITLE: Identification of essential genes in prokaryotes and use of their **antisense** constructs in antibiotic screening

INVENTOR(S): Haselbeck, Robert; Ohlsen, Kari L.; Zyskind, Judith W.; Wall, Daniel; Trawick, John D.; Carr, Grant J.; Yamamoto, Robert T.; Xu, H. Howard

PATENT ASSIGNEE(S): Elitra Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 511 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 22

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001070955	A2	20010927	WO 2001-US9180	20010321
WO 2001070955	A3	20020801		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1268774	A2	20030102	EP 2001-922557	20010321
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

PRIORITY APPLN. INFO.:
US 2000-191078P P 20000321
US 2000-206848P P 20000523
US 2000-207727P P 20000526
US 2000-242578P P 20001023
US 2000-253625P P 20001127
US 2000-257931P P 20001222

US 2001-269308P P 20010216
WO 2001-US9180 W 20010321

AB Genes required for **proliferation** of **Staphylococcus aureus**, *Salmonella typhimurium*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, and *Enterococcus faecalis*. Libraries of genomic fragments were operably cloned into vectors comprising inducible promoters in the **antisense** orientation, and selected for those genes which fail to grow or grow at a substantially reduced rate when the promoter is induced. The sequences of **antisense** nucleic acids which inhibit the **proliferation** of prokaryotes are disclosed. Cell-based assays which employ the **antisense** nucleic acids to identify and develop antibiotics are also disclosed. The **antisense** nucleic acids can also be used to identify proteins required for **proliferation**, express these proteins or portions thereof, obtain antibodies capable of specifically binding to the expressed proteins, and to use those expressed proteins as a screen to isolate candidate mols. for rational drug discovery programs. The nucleic acids can also be used to screen for homologous nucleic acids that are required for **proliferation** in cells other than **Staphylococcus aureus**, *Salmonella typhimurium*, *Klebsiella pneumoniae*, and *Pseudomonas aeruginosa*. The nucleic acids of the present invention can also be used in various assay systems to screen for **proliferation** required genes in other organisms. [This abstr. record is the third of three records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

L5 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:532775 CAPLUS

DOCUMENT NUMBER: 139:96381

TITLE: Protein and nucleotide sequences of modified tetracycline repressor protein compositions and methods of use

INVENTOR(S): Hillen, Wolfgang

PATENT ASSIGNEE(S): Germany

SOURCE: PCT Int. Appl., 453 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003056021	A2	20030710	WO 2002-GB5889	20021223
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2001-343278P P 20011221

AB The present invention relates to a system for regulating gene expression in prokaryotes using modified tetracycline repressor proteins. In particular, the present invention relates to modified tetracycline repressor proteins that exhibit a 'reverse' phenotype in prokaryotic organisms, nucleic acids encoding these repressor proteins, methods for identifying and prep. these proteins, and methods for using these proteins for regulating gene expression in prokaryotic organisms, in drug

screening assays and for identifying non-antibiotic compds. that are specific inducers of these modified repressor proteins.

L5 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:832949 CAPLUS

DOCUMENT NUMBER: 137:346147

TITLE: Methods for identifying the target of a compound which inhibits cellular **proliferation**

INVENTOR(S): Carr, Grant J.; Xu, Howard H.; Foulkes, Gordon J.; Zamudio, Carlos; Haselbeck, Robert; Ohlsen, Kari L.; Zyskind, Judith W.; Wall, Daniel; Trawick, John D.; Yamamoto, Robert T.; Roemer, Terry; Jiang, Bo; Boone, Charles; Bussey, Howard

PATENT ASSIGNEE(S): Elitra Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 640 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002086097	A2	20021031	WO 2002-US3987	20020208
WO 2002086097	A3	20030306		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-267636P P 20010209

AB The invention relates to cultures or collections of strains which overexpress or underexpress gene products required for the **proliferation** of an organism. The invention also includes methods for identifying the target on which a compd. which inhibits the **proliferation** of an organism acts and methods for identifying the extent to which a strain is present in a culture or collection of strains. The invention claims a total of 15,771 sequences, but the Sequence Listing was not made available at the time of publication of this patent application.

L5 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:504903 CAPLUS

DOCUMENT NUMBER: 137:74412

TITLE: Construction of fusion promoters and vectors for regulating gene expression in bacteria

INVENTOR(S): Haselbeck, Robert; Wall, Dan; Gross, Molly

PATENT ASSIGNEE(S): Elitra Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 246 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 22

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051982	A2	20020704	WO 2001-US50250	20011221

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
 FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
 MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL,
 TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
 KG, KZ, MD, RU
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003027286 A1 20030206 US 2001-32393 20011221

PRIORITY APPLN. INFO.:

US 2000-230335P P 20000906

US 2000-259434P P 20001227

US 2001-948993 A 20010906

AB Comps. and methods are disclosed herein that relate to the development of fusion promoters for regulating gene expression in bacteria, and esp. in **Staphylococcus aureus** or **Enterococcus faecalis**.

Embodiments include fusion promoters comprising one or more operators linked to a promoter that is modified to have altered activity in Gram-pos. organisms. The fusion promoter comprises at least one promoter selected from the group consisting of bacteriophage T5, lactococcus lactis CP25, P32, P59, P1P2, and PL, said promoter being linked to at least one operator selected from the group consisting of xylO, tetO, trpO, malO, and .lambda.c10. Thus, in a preferred embodiment, xylose operator xylO is operably linked to a bacteriophage T5 promoter such that transcription from the fusion promoter is inducible by agents that inhibit the binding of the xylose repressor to the xylose operator. This Xyl-T5 promoter can also contain several other elements including AT-rich boxes that enhance the efficiency of gene expression in Gram-pos. bacteria. Vectors and cells contg. these fusion promoters are also described. Other embodiments include, methods of using these fusion promoters to regulate nucleic acid and/or polypeptide expression, methods of using these fusion promoters to identify **proliferation**-required genes, and methods of using these fusion promoters to identify mols. having potential antibiotic activity.

L5 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:489638 CAPLUS

DOCUMENT NUMBER: 135:103442

TITLE: Genes identified as required for **proliferation** of *Escherichia coli* and their use in antimicrobial drug discovery

INVENTOR(S): Forsyth, R. Allyn; Ohlsen, Kari L.; Zyskind, Judith W.

PATENT ASSIGNEE(S): Elitra Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 596 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001048209	A2	20010705	WO 2000-US34419	20001219
WO 2001048209	A3	20020502		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
 CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI,
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
 KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR,
 TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
 RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002022718 A1 20020221 US 2000-741669 20001219
 EP 1244789 A2 20021002 EP 2000-986553 20001219
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 JP 2003518386 T2 20030610 JP 2001-548722 20001219
 PRIORITY APPLN. INFO.: US 1999-173005P P 19991223
 WO 2000-US34419 W 20001219

AB The sequences of nucleic acids encoding proteins required for E. coli **proliferation** are disclosed. The nucleic acids can also be used to screen for homologous genes that are required for **proliferation** in microorganisms other than E. coli. The nucleic acids can also be used to design expression vectors and secretion vectors. The nucleic acids can be used to express proteins or portions thereof, to obtain antibodies capable of specifically binding to the expressed proteins, and to use those expressed proteins as a screen to isolate candidate mols. for rational drug discovery programs. The nucleic acids of the present invention can also be used in various assay systems to screen for antimicrobial agents.

L5 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:360183 CAPLUS

DOCUMENT NUMBER: 134:362273

TITLE: Genes essential for microbial **proliferation** and their use for antimicrobial screening or in **antisense** therapy

INVENTOR(S): Forsyth, R. Allyn; Ohlsen, Kari; Zyskind, Judith

PATENT ASSIGNEE(S): Elitra Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 522 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034810	A2	20010517	WO 2000-US30950	20001109
WO 2001034810	A3	20020510		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6589738 B1 20030708 US 2000-711164 20001109

PRIORITY APPLN. INFO.: US 1999-164415P P 19991109

AB The sequences of nucleic acids encoding proteins required for E. coli **proliferation** are disclosed. The nucleic acids can be used to express proteins or portions thereof, to obtain antibodies capable of specifically binding to the expressed proteins, and to use those expressed proteins as a screen to isolate candidate mols. for rational drug discovery programs. The nucleic acids can also be used to screen for homologous genes that are required for **proliferation** in microorganisms other than E. coli. The nucleic acids can also be used to design expression vectors and secretion vectors. The nucleic acids of the present invention can also be used in various assay systems to screen for **proliferation** required genes in other organisms as well as to screen for antimicrobial agents.

L5 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:331243 CAPLUS
 DOCUMENT NUMBER: 134:348976
 TITLE: Method for identifying microbial **proliferation** genes by introduction into a microorganism an exogeneous nucleic acid with similarity to the microbial gene
 INVENTOR(S): Zyskind, Judith W.; Forsyth, R. Allyn
 PATENT ASSIGNEE(S): San Diego State University Foundation, USA
 SOURCE: U.S., 28 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6228579	B1	20010508	US 1997-971090	19971114
US 2002058260	A1	20020516	US 2001-805664	20010313

PRIORITY APPLN. INFO.: US 1997-971090 A3 19971114

AB A method for identifying endogenous microbial **proliferation** genes for growth and viability is disclosed herein. The method involves exogenous nucleic acids that are used to conditionally produce **antisense** inhibitors of endogenous complementary mRNAs in a microorganism. **Antisense** fragments that result in lethality when expressed indicate that the endogenous gene is a **proliferation** gene. The method can also be used with sequences in sense orientation encoding a protein that interferes with the normal function of the endogenous **proliferation** product. Clones pJB37, pJB57, pJB59, pJB53, which were isolated from Escherichia coli chromosomal DNA library, inhibited bacterial **proliferation** and contained genes in an **antisense** orientaion. The genes are: lepB, encoding the leader peptidase, ddlB, encoding D-alanyl:D-alanine ligase, anpG, encoding a protein forming a cytoplasmic membrane pore involved in peptidoglycan transport, and a new gene designated viaA (viability inhibited by **antisense**). Clones pJB3, pJB60, pJB58 inhibited bacterial **proliferation** and contained gene fragments in sense orientaion. The genes are: secA, encoding ATP-dependent translocase, ugpB, encoding sn-glycerol-3-phosphate binding protein, and a gene homologous to the E. coli fimF and fimD genes. The strategy can be used to identify new gene targets for novel antibiotics.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:735387 CAPLUS
 DOCUMENT NUMBER: 135:294008
 TITLE: Antibody-coated adsorbents, column system having the adsorbents for hemodialysis or plasmapheresis, and therapy using the system
 INVENTOR(S): Dunzendorfer, Udo
 PATENT ASSIGNEE(S): Germany
 SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001276217	A2	20011009	JP 2000-102606	20000404

PRIORITY APPLN. INFO.: JP 2000-102606 20000404

AB The adsorbents, useful for removing pathogenic factors from plasma or

tissues, are coated with antibodies to TNF, TNF metabolites, TNF transport proteins, or TNF fragments. The adsorbents may be addnl. coated with monoclonal or polyclonal antibodies to pathogenic factors such as cold agglutinins, HLA antigens, hepatitis virus antigens, .beta.2-microglobulins, bacterial toxins, etc. A column system having the adsorbents and clin. use of the system are also claimed. Selective removal of these pathogens, antigens, proteins, etc. leaves all normal plasma components unchanged and obviates the need for supplementation of the plasma with these components. Suitable substrates include polymers, polymer-coated metals, glass, cellulose, agar, Sepharose, etc. Thus, dextran sulfate-induced colitis was successfully treated by plasmapheresis coupled with adsorbents coated with anti-TNF-.alpha. antibody. Addnl. coating of the adsorbents with anti-protein A antibody enhances the effect.

L5 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:535285 CAPLUS

DOCUMENT NUMBER: 133:130817

TITLE: Genes identified as required for **proliferation** in *Escherichia coli*

INVENTOR(S): Zyskind, Judith; Ohlsen, Kari L.; Trawick, John; Forsyth, R. Allyn; Froelich, Jamie M.; Carr, Grant J.; Yamamoto, Robert T.; Xu, H. Howard

PATENT ASSIGNEE(S): Elitra Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 316 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000044906	A2	20000803	WO 2000-US2200	20000127
WO 2000044906	A3	20010201		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2360085	AA	20000803	CA 2000-2360085	20000127
EP 1149166	A2	20011031	EP 2000-914458	20000127
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
EP 1178052	A2	20020206	EP 2001-124215	20000127
EP 1178052	A3	20030402		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
US 2002045592	A1	20020418	US 2001-912020	20010723
PRIORITY APPLN. INFO.:			US 1999-117405P P	19990127
			EP 2000-914458 A3	20000127
			US 2000-492709 A3	20000127
			WO 2000-US2200 W	20000127

AB The sequences of nucleic acids encoding proteins required for *Escherichia coli* **proliferation** are disclosed. The genes were identified by cloning exogenous nucleic acid sequences into an ITPG-inducible expression vector and assaying for growth inhibition activity by the **antisense** RNA. The effectiveness of the assay was validated using constructs expressing **antisense** RNA to *E. coli* genes *rplL*, *rplJ*, and *rplW* encoding ribosomal proteins L7/L12, L10, and L23, resp. The

nucleic acids can be used to express proteins or portions thereof, to obtain antibodies capable of specifically binding to the expressed proteins, and to use those expressed proteins as a screen to isolate candidate mols. for rational drug discovery programs. The nucleic acids can also be used to screen for homologous genes that are required for **proliferation** in microorganisms other than E. coli . The nucleic acids can also be used to design expression vectors and secretion vectors. The nucleic acids of the present invention can also be used in various assay systems to screen for **proliferation** required genes in other organisms as well as to screen for antimicrobial agents.

L5 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:275313 CAPLUS
DOCUMENT NUMBER: 132:313670
TITLE: Coated substrates for blood, plasma, or tissue washing and columns equipped with these substrates
INVENTOR(S): Dunzendorfer, Udo; Will, Gottfried
PATENT ASSIGNEE(S): Germany
SOURCE: Ger. Offen., 30 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19845286	A1	20000427	DE 1998-19845286	19981001
EP 1004598	A2	20000531	EP 1999-118541	19990918
EP 1004598	A3	20000607		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: DE 1998-19845286 19981001

AB Columns, filters, cannulas, etc. contg. substrates coated with specific antibodies can be used during plasmapheresis to remove pathogenic cytokines such as tumor necrosis factor (TNF), anti-TNF, fragments of TNF or anti-TNF, or TNF transport proteins from blood, plasma, or tissues. The substrates may addnl. be coated with antibodies to microbial or viral pathogens or mixts. of pathogens as well as to polysaccharide antigens, viral capsids, microbial antigens, reverse transcriptase, endothelin, protein A, etc. Selective removal of these pathogens, antigens, proteins, etc. leaves all normal plasma components unchanged and obviates the need for supplementation of the plasma with these components. Suitable substrates include polymers, polymer-coated metals, cellulose derivs., starch, and Sepharose; these may be derivatized for covalent binding of the pathogens or pathogenic mols. Thus, Escherichia coli pyelonephritis was successfully treated by plasmapheresis coupled with columns loaded with anti-TNF-.alpha. for 14 days, 4 h/day, as detd. by decreases in plasma TNF-.alpha. levels and colony counts in urine cultures.

L5 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:550443 CAPLUS
DOCUMENT NUMBER: 129:188363
TITLE: Noncovalent complex of an antibody and immunoglobulin-binding element associated with an active substance, method of preparation, and applications
INVENTOR(S): Drevet, Pascal; Leonetti, Michel; Menez, Andre
PATENT ASSIGNEE(S): Commissariat A L'Energie Atomique, Fr.
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9834956	A1	19980813	WO 1998-FR227	19980206
W: US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2759296	A1	19980814	FR 1997-1420	19970207
FR 2759296	B1	19990409		

PRIORITY APPLN. INFO.: FR 1997-1420 19970207

AB The invention concerns a noncovalent complex comprising at least an antibody or an antibody fragment capable of binding with a mol. expressed at a cell surface, and an Ig-binding element assocd. with an active substance (e.g. antigen, drug, nucleic acid fragment), the complex having a specific affinity for appropriate target cells. The invention also concerns compns. contg. the complexes and their applications. The noncovalent complex comprises (i) at least an antibody or an antibody fragment capable of being bound with a mol. expressed at a cell surface and (ii) an Ig binding element, assocd. with an active substance, the binding element only being bound with a single type of site on the Ig (e.g. Fc site or Fab site). The noncovalent complexes of the invention are advantageous in that e.g. the Ig binding element-active substance portion may be stored sep. and be used with any cell-targeting antibody, in contrast to a covalently bonded system.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1987:189895 CAPLUS

DOCUMENT NUMBER: 106:189895

TITLE: Complementary RNA in prokaryotic cells

AUTHOR(S): Fuchs, Ota

CORPORATE SOURCE: Ustav Hematol. Krevni Transf., Prague, 128 20, Czech.

SOURCE: Biologické Listy (1986), 51(4), 285-95

CODEN: BILIC; ISSN: 0366-0486

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Czech

AB A review with 36 refs. The copy no. of Escherichia coli plasmids of the ColE1 family is regulated at the level of the formation of an RNA mol. that serves as primary for the enzyme DNA polymerase I. Neg. regulation is obtained by the interaction between the precursor of the primer and RNA I, a plasmid-encoded small RNA. The RNA-RNA interaction in the regulation of initiation of plasmid replication is not a peculiar feature of ColE1-type plasmids. Unrelated plasmids, such as E. coli plasmids R1 and R100 or *Staphylococcus aureus* plasmid pT181, are similarly regulated. In these three cases, however, the small RNA affects the ability of the longer transcript (equiv. to the ColE1 primer) to act as messenger for the synthesis of a protein essential for plasmid replication. Other complementary small RNAs have been implicated in the control of expression of prokaryotic genes. The **antisense** RNA (also called the micRNA = mRNA-interfering complementary RNA) contains sequences that are complementary to those of the mRNA whose translation is regulated. The **antisense** RNA forms a duplex with the complementary message, thereby preventing efficient translation. This type of translational control plays a role in the regulation of transposon Tn10 transposition in E. coli. A similar mechanism has been proposed to explain the reciprocal regulation of the expression of genes coding for the outer membrane diffusion pores proteins OmpF and OmpC in E. coli. The artificial micRNA has been successfully used in a variety of systems as a powerful genetic tool to block the expression of specific mRNA. The induction of micRNA directed against the coat protein and/or the replicase of the E. coli bacteriophage SP effectively prevent phage **proliferation**. The micRNA immune system provides an effective means of preventing viral infection as well as the expression of harmful

genes.